

PCT

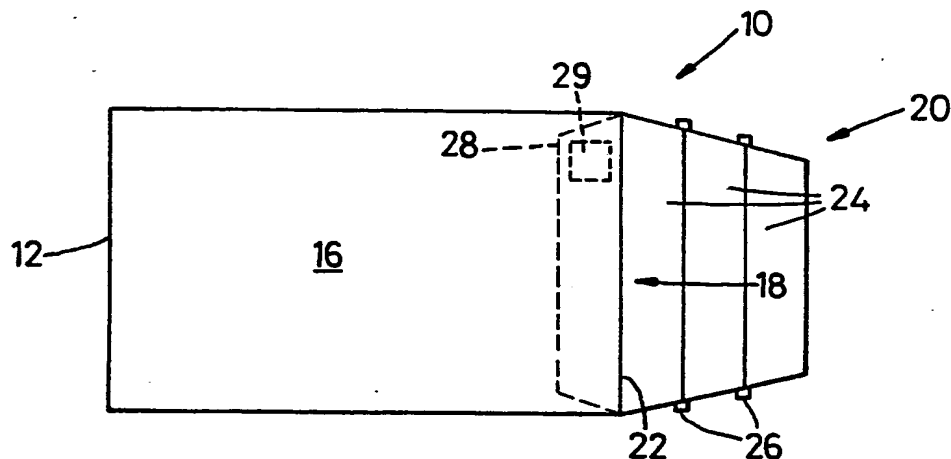
WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification 5 :</b> <b>B65D 27/06</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 93/19991</b> <b>(43) International Publication Date:</b> 14 October 1993 (14.10.93)
<b>(21) International Application Number:</b> PCT/GB93/00451 <b>(22) International Filing Date:</b> 4 March 1993 (04.03.93)  <b>(30) Priority data:</b> 9207173.7 1 April 1992 (01.04.92) GB  <b>(71)(72) Applicant and Inventor:</b> HUSNU, Ahmet, Mehmet [GB/GB]; 143 Stanstead Road, Forest Hill, London SE23 1HH (GB).  <b>(74) Agent:</b> FITZPATRICKS; Cardinal Court, 23 Thomas More Street, London E1 9YY (GB).  <b>(81) Designated States:</b> AU, BG, BR, CA, FI, HU, JP, LK, NO, PL, RO, RU, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).		<b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>

**(54) Title:** RE-USABLE ENVELOPES



**(57) Abstract**

An envelope (10) comprising a flat flexible container having a document storage space sealable by a flat (20) foldable from a front portion (14) of the container over a mouth (18) thereof to enable sealing of the storage space by adhering said flap to a back portion (16) of the container. In one embodiment the sealing flap has at least two sealing portions (24) thereby allowing the envelope to be securely sealed by the flap by utilising an outermost sealing portion. On opening, the envelope can be reused by utilising the second or subsequent sealing portion (24). In a second embodiment, there is provided a second flap (28) which, in addition to the first flap, allows the envelope to be reused at least twice. In a further embodiment, the envelope includes a detachable address portion (30).

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FR	France	MR	Mauritania
AU	Australia	GA	Gabon	MW	Malawi
BB	Barbados	GB	United Kingdom	NL	Netherlands
BE	Belgium	GN	Guinea	NO	Norway
BF	Burkina Faso	GR	Greece	NZ	New Zealand
BG	Bulgaria	HU	Hungary	PL	Poland
BJ	Benin	IE	Ireland	PT	Portugal
BR	Brazil	IT	Italy	RO	Romania
CA	Canada	JP	Japan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SK	Slovak Republic
CI	Côte d'Ivoire	LI	Liechtenstein	SN	Senegal
CM	Cameroon	LK	Sri Lanka	SU	Soviet Union
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	MC	Monaco	TC	Togo
DE	Germany	MG	Madagascar	UA	Ukraine
DK	Denmark	ML	Mali	US	United States of America
ES	Spain	MN	Mongolia	VN	Viet Nam
FI	Finland				

## RE-USABLE ENVELOPES

The present invention relates to envelopes of the type comprising a flat flexible container made of paper, or the like, the interior of which defines a document storage space, and which includes a sealing member for sealing said storage space.

Envelopes of the above type are well known and are normally constructed by die cutting a paper or cardboard blank and gluing said blank with an overlapped back seam and with bottom and sealing flaps both adhering to a back portion.

Many alternative constructions of envelopes are known but essentially all result in a flat flexible container having a document storage space sealable by a flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container. Envelopes according to such known constructions are normally only able to be used once since, when gaining access to enclosed documents, the flap is irreparably damaged by tearing along or adjacent its line of folding.

Envelopes having a self-sealing flap are known whereby the adhesive on the flap is such that the flap can be easily re-opened to allow access to enclosed documents. However, it is common for users of such envelopes to employ additional sealing means, for example, sticking tape, since the ability to re-open the envelope presents a security risk with regard to

the enclosed documents. Therefore, the envelope must thereafter be opened in a conventional manner which results in damage to the flap and prevents re-use of the envelope.

5       It is also known for envelopes of conventional construction to be provided for re-use particularly where a receiver of documents is requested to return enclosed documents, or at least send a response, perhaps by making a payment in settlement of an  
10   account, for example, by re-using the envelope in which the documents were enclosed. Whilst it is usual in such instances for the documents to be enclosed in the envelope with the sealing flap not firmly adhered to the back portion to allow for easy access to the  
15   enclosed documents, it is still possible for the receiver to damage the envelope on opening only then becoming aware that the envelope is intended to be reused.

      A further problem with envelopes of conventional  
20   construction is that they are normally provided with a transparent window in order that the address of the receiver marked on the enclosed documents can be viewed through said window by the carrier. In such cases, where the envelope is to be re-used, it is normally  
25   necessary for the receiver to return at least part of the enclosed documents, together with a payment for example, whereby the documents must be replaced in the envelope in a reverse manner in order that the return address is viewable through the window. It is common

for this simple procedure to be mistakenly carried out such that the documents to be returned are placed in the envelope in such a manner that no address is viewable through the window, or alternatively, the  
5 receivers' address is once again viewable resulting in the envelope not being carried directly to the return destination.

It is an object of the present invention to provide a re-usable envelope which obviates or mitigates the  
10 aforementioned problems.

According to one aspect of the present invention there is provided an envelope comprising a flat flexible container having a document storage space sealable by a flap foldable from a front portion of the  
15 container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container, wherein the flap has at least two separable sealing portions.

Preferably, the sealing portions each substantially  
20 span the width of the flap in a direction generally parallel with a line about which the flap is foldable.

Preferably, each sealing portion is coated with a water activated adhesive.

Alternatively, each sealing portion may be coated  
25 with a self-adhering adhesive.

Each sealing portion may be separable from an adjacent sealing portion by means of perforations in the flap along a line separating said sealing portions.

Alternatively, the sealing portions may be separable by means of a tear-strip located between said adjacent sealing portions, the tear-strip being accessible from an oppositely facing surface of the flap from that which faces toward the mouth of the container.

Alternatively further, the sealing portions may be separable by an adhesive strip joining the sealing portions together, the adhesive strip being accessible for removal thereof from the oppositely facing surface of the flap.

According to a second aspect of the present invention there is provided a blank for an envelope according to the next seven proceeding paragraphs.

According to a third aspect of the present invention there is provided an envelope comprising a flat flexible container having a document storage space sealable by a first flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container and a second flap is provided as an alternative means of sealing the storage space wherein the second flap is foldable from the front or back portion over the mouth for adhering to the back or front portion respectively.

The first flap may have at least two separable sealing portions.

The second flap may have at least two separable sealing portions.

According to a fourth aspect of the present invention there is provided a blank for an envelope according to the next three preceding paragraphs.

According to a fifth aspect of the present invention, there is provided an envelope comprising a flat flexible container having a document storage space sealable by a flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container wherein, there is provided on at least one of said front or back portions a detachable address portion.

The detachable address portion may be integral with the front or back portions and detachable by means of a perforated boundary.

Preferably a transparent window is provided underneath the detachable address portion whereupon removal of said detachable address portion reveals the window.

Alternatively, an address label is provided underneath the detachable address portion whereupon removal of the detachable address portion reveals the address label for use.

According to a sixth aspect of the present invention there is provided a blank for an envelope according to the next four preceding paragraphs.

The foregoing and further features of the present invention will be more readily understood from the following description of preferred embodiments, by way

of example thereof, with reference to the accompanying drawings, of which:

Fig 1 is a rear view of an envelope embodying at least the first and third aspects of the present invention including a sealing flap which is shown in an open position;

Fig 2 is a similar view of the envelope of Fig 1 with the sealing flap shown in a sealed position;

Fig 3 is a front view of an envelope embodying at least the fifth aspect of the present invention;

Fig 4 is a rear view of the envelope of Fig 3 with a part of a back portion of the envelope removed to provide a partial view of an inner side of a front portion of said envelope; and

Fig 5 is a blank for an envelope embodying all aspects of the present invention.

Figures 1 to 4 appended hereto each show an envelope 10 embodying various aspects of the present invention either singularly, or collectively. The envelope 10 is formed from a blank of paper, or the like, and comprises a flat flexible container 12 consisting of a substantially rectangular flat front portion 14 superposed on a substantially similar back portion 16. The front and back portions 14, 16 are fixed together around three of their four respective coincident edges and define therebetween a document storage space. Documents can be placed in the document storage space by insertion through a mouth 18 of the container 12. The mouth 18 is bounded by the two



unfixed coincident edges of the front and back portions 14, 16 respectively. The document storage space is sealable by means of a flap which is foldable from the front portion 14 over the mouth 18 of the container 12 to be adhered to the back portion 16 of said container 14.

Figures 1 and 2 show an envelope 10 embodying at least the first and third aspects of the present invention. The envelope 10 of these figures includes a flap 20 which extends from the front portion 14 of the container 12 beyond the mouth 18 and is foldable about a line 22 defining a part of said mouth. The flap 20 can be folded over the mouth 18 about said line 22 for adhering to the back portion 16 of the container 12 in order to seal the storage space of the container 12. Flap 20 has a number of separable sealing portions 24 which span the width of said flap in a direction generally parallel with fold line 22.

The sealing portions 24 can each be separately used to seal the document storage space of the container 12 when the flap 20 is folded about the mouth 18 to come into contact with the back portion 16.

It is intended that the sealing portion 24 located towards the outermost edge of the flap 20 farthest from the mouth 18 of the container 12 is utilised to seal the document storage space of the envelope 10 when said envelope 10 is first used. When the envelope 10 is then opened the outermost sealing portion should be separated from the remaining sealing portions to allow

the flap 20 to be folded away from the back portion 16 to allow access to documents enclosed in the envelope 10. Reuse of the envelope 10 is possible by once again folding the flap about the mouth to bring it in to  
5 contact with the back portion 16 and using the next outermost sealing portion 24 to seal said envelope 10. Instructions 25 to remind a user that the envelope 10 is to be sealed by using only the outermost unused sealing portion 24 may be printed on a surface of the  
10 flap 20 facing away from the mouth 18. Therefore, whilst folding the flap 20 about the mouth 18, a user will see said instructions 25 and be reminded of the manner in which it is intended that the envelope 10 be sealed.

15 The sealing portions 24 may be separable by means of tear-strips 26 located between adjacent sealing portions 24 wherein said tear-strips 26 are accessible from the outward facing side of the flap 20 such that when the flap 20 is folded about the mouth 18 to come  
20 into contact with the back portion 16 and adhered to the back portion 16 by using the outermost unused sealing portion 24, the tear-strip 26 will still be accessible for opening the envelope 10. Opening of the envelope 10 will be achieved by removal of the tear  
25 strip 26 which will separate the sealing portion 24 adhered to the back portion 16 from the remaining sealing portions 24 which have not been adhered to said back portion 16. Once again, the instructions on the

outward facing surface of the flap 20 will remind the opener of the need to remove the correct tear-strip 26.

It is recognised that the provision of tear strips 26 for separating adjacent sealing portions 26 would add to the expense of manufacturing an envelope 10 according to this aspect of the invention. Therefore, it is possible that the envelope might be formed with the sealing portions 24 of the flap 20 separable by means of perforations formed along lines separating said adjacent portions 24. Alternatively, the sealing portions 24 may be separable by means of adhesive strips which hold adjacent sealing portions 24 together whereupon removal of an adhesive strip separates said adjacent sealing portions 24.

The envelope 10 may also be provided with a second flap 28 (shown in broken outline in Figure 1) which is foldable from a back portion 16 of the container over the mouth 18 to be adhered to the front portion 14 in order to seal the document storage space of the container 12. Such a flap 28 may be provided in an envelope 10 including a first flap 20 comprising separable sealing portions 24, or alternatively, in an envelope 10 including a conventional sealing flap foldable from the front portion to be adhered to the back portion for sealing the envelope 10. The second flap 28 is foldable so as to be able to be located within the document storage space of the container 12 such that it will not impede insertion of documents in said storage space. Should the envelope 10 be opened

by a person using an envelope knife, or the like, to cut the first flap along its fold, the envelope 10 can still be reused by withdrawing the second flap 28 from the document storage space and folding said flap 5 28 to overlap the front portion 14 and adhering thereto. The provision of a second flap 28 according to this aspect of the invention would add negligibly to the cost of producing conventional envelopes.

The size of the second flap 28 may be such that in 10 use, when adhered to the front portion 14 of the container 12, the flap 28 covers a stamp placement area 29 (shown in broken outline in figures 1 and 5) on the front portion 14 thereby masking stamps and franking marks placed on said stamp placement area 29 during 15 previous use of the envelope 10.

The flap 28 may even be made sufficiently large to cover a substantial part of the front portion 14 including an address area (not shown) or address window. Accordingly, the flap 28 may include a stamp 20 placement area 29' (shown in broken outline in figure 5) and an address area (not shown) to enable reuse of the envelope 10.

It will be appreciated that the second flap 28 may be foldable from the front portion 14 of the container 25 rather than the back portion. However, the provision of a second flap 28 foldable from a portion of the container opposite to that from which the flap 20 folds would allow the container to be formed from a single die-cut blank.

The sealing portions 24 on the first flap 20 and the second flap 28 may be coated with a water activated adhesive, or alternatively, a self sealing adhesive.

Referring now to figures 3 and 4, there is shown an envelope which may be generally of conventional construction or which may include sealing flaps 20, 28 in accordance with the afore-mentioned embodiments of the invention. The envelope 10 of these figures includes a detachable address portion 30 (shown in broken outline in both figures 3 and 4). The address portion is formed integrally with the front portion 14 of the envelope 10 and is detachable by means of a perforated boundary. However, the address portion 30 may be detachable by means of a tear-strip or the like.

The address portion 30, when detached from the envelope 10, reveals a transparent window 32, or alternatively, an address label 32. The transparent window 32 comprises a transparent sheet adhered to an inner surface of the front portion 14 of the envelope 10 to extend beyond the boundaries of the detachable address portion 30. Similarly, where an address label 32 is provided underneath the detachable address portion 30, it comprises a paper sheet adhered to the inner surface of said front portion 14 and it also extends beyond the boundaries of said detachable address portion 30. In use, an envelope 10 including a detachable address portion 30 may carry the receiver's address details on said detachable portion 30. The envelope 10 may include flaps 20, 28 as hereinbefore

described to enable its reuse and the receiver would be instructed to remove the detachable address portion 30 to reveal either the transparent window or address label 32.

5        In the case where a transparent window 32 is provided underneath the detachable address portion 30, the document receiver would be requested to insert documents to be returned, for example, with the return address viewable through said transparent window. In  
10       the alternative case where an address label 32 is provided, the receiver may be requested to enter the return address details on said label or alternatively the return address may already be pre-printed thus ensuring that the envelope at least is returned to the  
15       correct address.

Figure 5 shows a paper blank 100 for an envelope 10 embodying all aspects of the present invention. The blank 100 comprises a rectangular front portion 14 foldable about a fold line 102 to be superposed with a  
20       back portion 16. The front portion is provided with flaps 104 to enable the back portion 14 to be firmly adhered thereto to provide a document storage space therebetween. The front portion 14 includes a perforated detachable address portion 30 and an address  
25       label/transparent window 32. The front portion 14 also includes a flap 20 with a number of separable sealing portions 24. The flap 20 is foldable about a fold line 22 which defines part of a mouth 18 of an envelope 10 formed from said blank. The back portion includes a

flap 28 which acts as a second sealing flap when the envelope 10 is constructed.

It will be clearly understood that an envelope may be provided including one, or a combination, of the  
5   aforementioned aspects of the invention, namely a sealing flap 20 having a number of separable sealing portions 24, a second sealing flap 28 or a detachable address portion 30.

The advantages of an envelope embodying some of  
10   said aspects will be evident to organisations who dispatch documents such as accounts to considerable numbers of addressees in order to obtain payment of such accounts and in so doing assist the addressees by providing a return envelope. The present invention  
15   obviates the needs to provide a separate return envelope and, in fact, provides an envelope which may be reused on more than one occasion. The present invention also obviates the known problems encountered with envelopes of conventional constructions which are  
20   provided for reuse.

## CLAIMS

1. An envelope comprising a flat flexible container having a document storage space sealable by a flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container, wherein the flap has at least two separable sealing portions.

2. An envelope has claimed in claim 1, wherein the sealing portions each substantially span the width of the flap in a direction generally parallel with a line about which the flap is foldable.

3. An envelope as claimed in claims 1 or 2, wherein each sealing portion is coated with a water activated adhesive.

4. An envelope as claimed in claims 1 or 2, wherein each sealing portion is coated with a self-adhering adhesive.

5. An envelope as claimed in any preceding claim, wherein each sealing portion is separable from an adjacent sealing portion by means of perforations in the flap along a line separating said sealing portions.

6. An envelope as claimed in any of claims 1 to 5, wherein the sealing portions are separable by means of a tear-strip located between said adjacent sealing portions, the tear-strip being accessible from an oppositely facing surface of the flap from that which faces toward the mouth of the container.



7. An envelope as claimed in any of claims 1 to 5, wherein the sealing portions are separable by an adhesive strip joining the sealing portions together, the adhesive strip being accessible for removal thereof  
5 from an oppositely facing surface of the flap.

8. A blank for an envelope according to any of the claims 1 to 7.

9. An envelope comprising a flat flexible container having a document storage space sealable by a  
10 first flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage space by adhering said flap to a back portion of the container and a second flap is provided as an alternative means of sealing the storage space wherein  
15 the second flap is foldable from the front or back portion over the mouth for adhering to the back or front portion respectively.

10. An envelope as claimed in claim 9, wherein the first flap has at least two separable sealing  
20 portions.

11. An envelope as claimed in claims 9 or 10, wherein the second flap has at least two separable sealing portions.

12. A blank for an envelope according to any of  
25 claims 9 to 11.

13. An envelope comprising a flat flexible container having a document storage space sealable by a flap foldable from a front portion of the container over a mouth thereof to enable sealing of the storage

space by adhering said flap to a back portion of the container wherein, there is provided on at least one of said front or back portions a detachable address portion.

5        14. An envelope as claimed in claim 13, wherein the detachable address portion is integral with the front or back portion and detachable by means of a perforated boundary.

10       15. An envelope as claimed in claim 13 or 14, wherein a transparent window is provided underneath the detachable address portion whereupon removal of said detachable address portion reveals the window.

15       16. An envelope as claimed in claims 13 or 14, wherein an address label is provided underneath the detachable address portion whereupon removal of the detachable address portion reveals the address label for use.

17. A blank for an envelope according to any of claims 13 to 16.

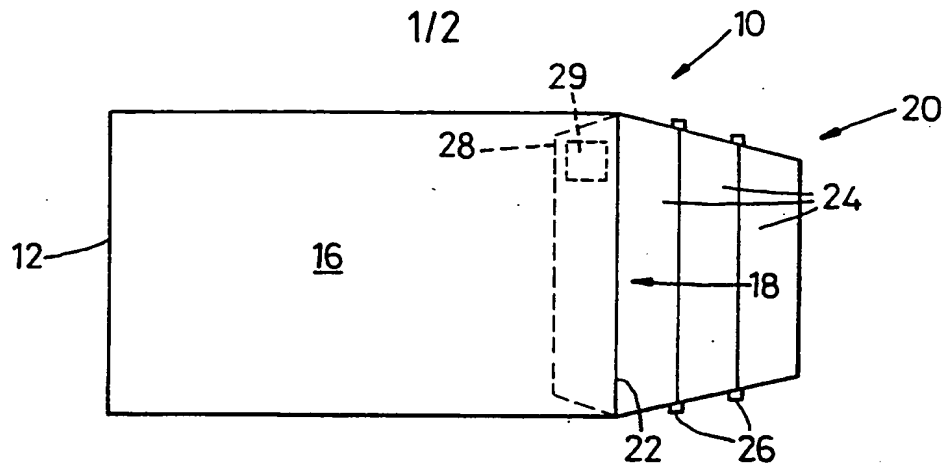


Fig. 1

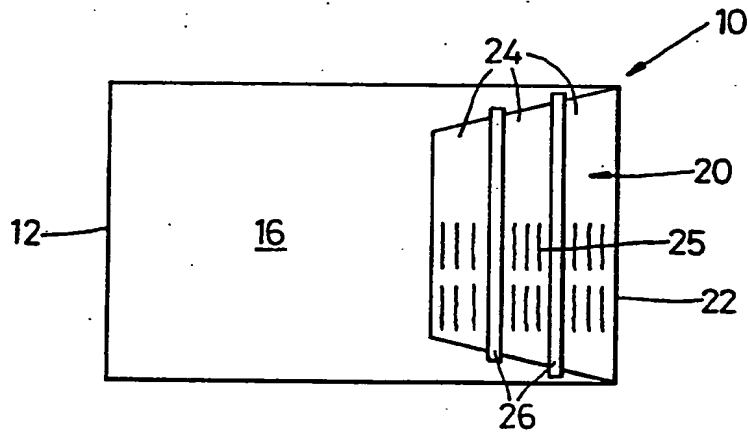


Fig. 2

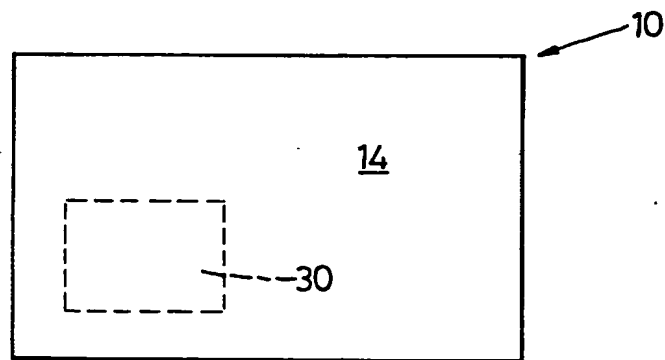


Fig. 3

2/2

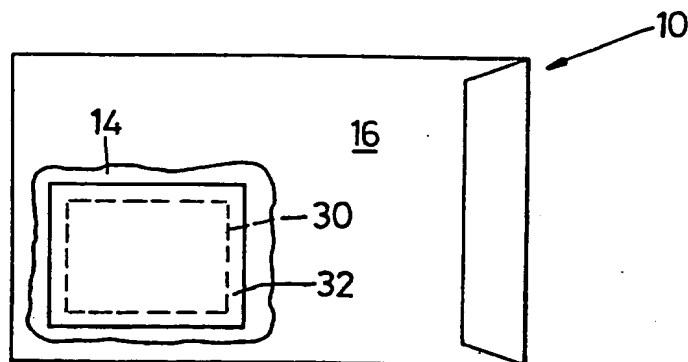


Fig. 4

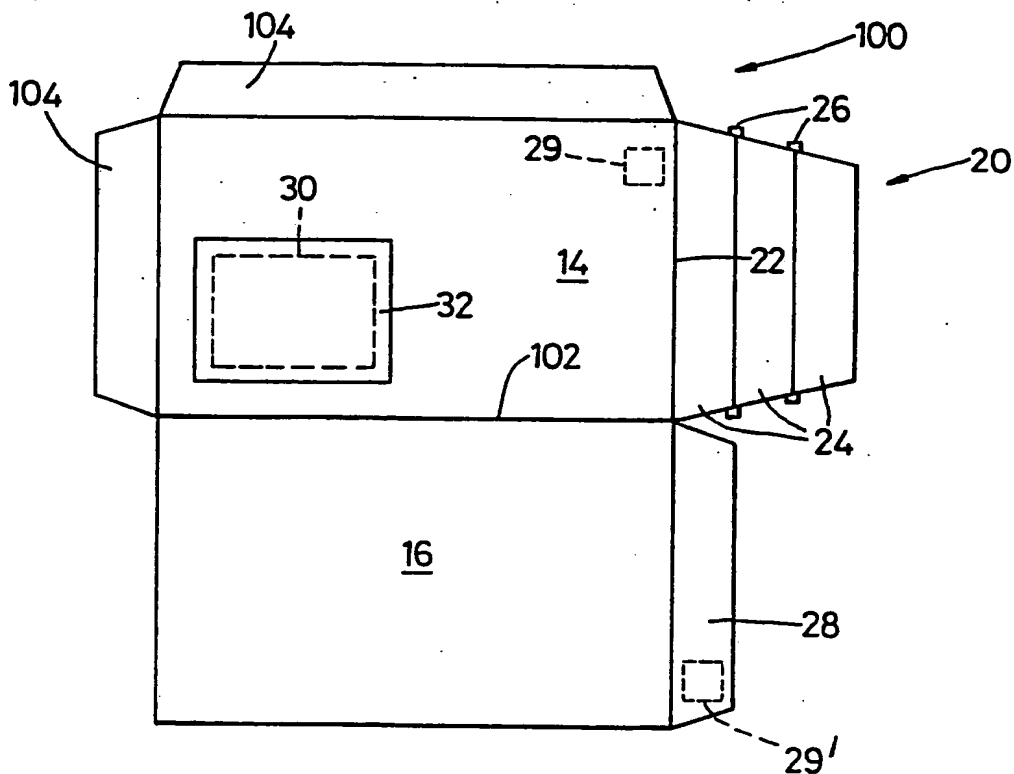


Fig. 5